Northwest Fisheries Science Center 2725 Montlake Blvd E Seattle, WA 98112 tel: 206-860-3408

fax: 206-860-3335

EDUCATION

1999 Ph.D., Fisheries - University of Washington. Seattle, WA
 1991 M.S., Fisheries - University of Washington. Seattle, WA

1986 B.S., Zoology - University of Wisconsin, Madison. Madison, WI

WORK EXPERIENCE

1999-Present

Spatial Ecologist at the Northwest Fisheries Science Center (NOAA-NMFS). I am responsible for designing and participating in research in two areas: the relationship between various fish populations and their terrestrial/marine habitat; and the interaction between non-indigenous species and estuarine/marine food webs and ecosystems. I use a landscape ecology approach for most of my research, but I am also interested in the effect of climate, spatio-temporal scaling, and various anthropogenic influences on freshwater and marine ecosystems.

1992-1999

Graduate student in Doctoral program at the University of Washington, School of Fisheries. Ray W. Hilborn, chairperson, Charles A. Simenstad, supervisor. Research focused on the dynamics of estuarine non-indigenous plant invasions. The title of my dissertation research was: "A spatio-temporal analysis of the environmental and climatic factors controlling the expansion of *Spartina alterniflora* in Willapa Bay, Washington". My objective was to determine how various climatic and environmental processes have governed the expansion of *S. alterniflora* in Willapa Bay. To reach this objective, I first characterized recruitment periodicity patterns and correlated them with climatic variables. Second, I created a habitat suitability matrix by comparing various GIS (Geographic Information System) datalayers (bathymetry, sediment texture type, oyster culture activity, predicted wave energy, proximity to freshwater input) with spatial extents of *S. alterniflora*. Third, I adopted the NOAA On-Scene Spill Model to predict seed dispersal patterns. Finally, I integrated the three aforementioned steps into a conceptual mechanistic model that described the expansion of *S. alterniflora* in Willapa Bay.

1992-1999

Research Assistant at the University of Washington, School of Fisheries. Charles A. Simenstad, supervisor. Responsible for and participated in a variety of landscape level, spatial analysis based projects including: classification of LANDSAT TM imagery for estuarine habitats in Willapa Bay; interpretation of aerial photography in estuarine and tidally influenced wetlands; spatial analysis of landscape level patterns in estuaries; development of estuarine restoration site ranking protocol using GIS and spatial analysis; monitoring vegetation change in breached dike estuarine wetlands using total station GPS and GIS; quantifying spatial extents of eelgrass associated with ferry docks using spatial analysis and GIS; assessment of potential dike-breach restoration of estuarine wetlands using GIS; identification and inventory of breached dike estuarine wetlands along the Washington, Oregon, and California coast.

1991-1999

Freelance computer graphics specialist at University of Washington (Nancy E. Blanton and Theodore W. Pietsch, supervisors) and for my own computer graphics business, "Dead Rendering." Produced custom computer generated maps, graphs, schematic drawings, illustrations, and web pages.

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1988-1991 Graduate student in Master's program at the University of Washington, School of

Fisheries. James J. Anderson, chairperson. Research examined the impacts of industrial noise (produced by pile driving in Puget Sound or hydroelectric projects on the Columbia River) on the behavior and spatial distributions of juvenile Pacific salmon. Responsible for

supervising five employees for the project both in the field and in the laboratory.

1987-1988 Associate research specialist for Dr. Erik Floor, University of Wisconsin, Madison.

Research was directed at elucidating the biochemical nature and function of purified mammalian CNS synaptic vesicle proteins. Methods used included various ultracentrifuge techniques, permeation chromatography, immunoprecipitation, Western blotting, radio immuno assay, tritiated catecholamine uptake, protein assays, enzyme linked immuno sorbent assays (ELISA), and development of monoclonal antibodies directed at purified

synaptic vesicle proteins.

1985-1986 Undergraduate senior thesis under Dr. John Magnuson, University of Wisconsin, Madison.

Investigated differences in resistance to low pH/dilute water environments of two populations of yellow perch (*Perca flavescens*) at the egg and fry stages of development. Used

atomic absorption spectrophotometry for calcium analysis.

Summer 84/85 Student hourly for Dr. John Harkin working on plausibility of converting commercial

cannery effluent into ethanol for use in gas-o-hol. Duties included analyses of: sugars, formaldehyde, and proteins using ultraviolet spectrophotometry; chemical oxygen demand; Bligh-Dyer assay; atomic absorption spectrophotometry, flame photometry and

ultra-filtration and reverse osmosis concentration of sugars.

COMPUTER EXPERIENCE

Hardware • Apple[®] Macintosh[®]; IBM[®] compatibles; unix

Proficiency • Trimble® total station Global Positioning System (GPS)

Software • Microsoft: Excel[®], Word[®], and PowerPoint[®]

Proficiency • Macromedia: Freehand®

• Adobe: Photoshop[®], Acrobat Professional[®], and Illustrator[®]

• ESRI: PC and Unix ARC/INFO® ArcGIS®, and ArcView® (GIS)

• MapInfo®: MapInfo® for PC and Mac (GIS)

• Erdas: Imagine®

• StatSoft: STATISTICA®

• Trimble: Pathfinder Office[®], and TrimMap[®]

PEER REVIEWED PUBLICATIONS

Feist, BE, C Parada, KE See, & JL Ruesink (In Prep) Using ROMS ocean circulation models to predict the range expansion of non-indigenous European green crab (*Carcinus maenas*) along the west coast of North America

Samhouri JF, DeBeukelaer S, Andrews KS, **Feist BE**, Sheer M, et al. (In Prep) Risk assessment for habitats in the Monterey Bay National Marine Sanctuary. *Marine Ecology Progress Series*

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- **Feist BE**, Bellman MA, Ford MJ, Becker EA, Forney KA, et al. (In Review) Potential interaction between cetaceans and various commercial groundfish fleets operating in the California Current Large Marine Ecosystem. *Fishery Bulletin*
- Harvey, CJ, **BE Feist**, JL Ruesink, AC Trimble, LM McCoy & NF Richardson (In Revision)
 Spatiotemporal diet composition of Pacific oysters in the Willapa Bay estuary, as determined by stable isotope analysis. *Marine Ecology Progress Series*
- Tolimieri N, Samhouri JF, Simon V, **Feist BE**, Levin PS (In Revision) Precipitous decline in exploited, high trophic level groundfish causes ecosystem reorganization in the California Current. *Ecosystems*
- Buhle, ER, **BE Feist** & R Hilborn (2012) Population dynamics and control of invasive *Spartina alterniflora*: inference and forecasting under uncertainty. *Ecological Applications* 22(3): 880-89
- Steel, EA, DW Jensen, KM Burnett, K Christiansen, JC Firman, **BE Feist**, KJ Anlauf & DP Larsen (2012) Landscape characteristics and coho salmon (*Oncorhynchus kisutch*) distributions: Explaining abundance versus occupancy. *Canadian Journal of Fisheries and Aquatic Sciences* 669(3): 457-468. doi:10.1139/F2011-161
- **Feist, BE**, ER Buhle, P Arnold, JW Davis & NL Scholz (2011) Landscape ecotoxicology of coho salmon spawner mortality in urban streams *Public Library of Science ONE* 6(8): e23424. doi:10.1371/journal.pone.0023424
- Anlauf, KJ, DW Jensen, KM Burnett, EA Steel, K Christiansen, JC Firman, **BE Feist** & DP Larsen (2011) Explaining spatial variability in stream habitats using both natural and management-influenced landscape predictors. *Aquatic Conservation: Marine and Freshwater Ecosystems* 21(7): 704-714. doi:10.1002/aqc.1221
- Fullerton, AH, ST Lindley, GR Pess, **BE Feist**, EA Steel, & P McElhany (2011) Human influence on the spatial structure of threatened Pacific salmon metapopulations. *Conservation Biology* 25(5): 932-944. doi:10.1111/j.1523-1739.2011.01718.x
- Firman, JC, EA Steel, DW Jensen, KM Burnett, K Christiansen, **BE Feist** & DP Larsen (2011) Landscape models of adult coho salmon density examined at four spatial extents. *Transactions of the American Fisheries Society* 140(2): 440-455.
- EA Steel, RM Hughes, AH Fullerton, S Schmutz, J Young, M Fukushima, S Muhar, M Poppe, **BE Feist** & C Trautwein (2010) Are we meeting the challenges of landscape-scale riverine research? A review. Living Reviews in Landscape Research 4(1): [Online Article] http://www.livingreviews.org/lrlr-2010-1
- Fullerton, AH, KM Burnett, EA Steel, RL Flitcroft, GR Pess, **BE Feist**, CE Torgersen, DJ Miller & BL Sanderson (2010) Hydrologic Connectivity for Riverine Fishes: Measurement Challenges and Research Opportunities. *Freshwater Biology* 55(11): 2215-2237.
- **Feist, BE**, EA Steel, DW Jensen & DND Sather (2010) Does the scale of our observational window affect our conclusions about correlations between endangered salmon populations and their habitat? *Landscape Ecology* 25(5): 727–743.
- See, KE & **BE Feist** (2010) Reconstructing the range expansion and subsequent invasion of introduced European green crab along the west coast of the United States. *Biological Invasions*. 12(5): 1305-1318.

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- Ruesink, JL, **BE Feist**, CJ Harvey, JS Hong, AC Trimble & LM Wisehart (2006) Changes in productivity associated with four introduced species: Ecosystem transformation of a "pristine" estuary. *Marine Ecology Progress Series* 311: 203-215.
- Steel, EA, **BE Feist**, D Jensen, GR Pess, M Sheer, J Brauner & RE Bilby (2004) Landscape models to understand steelhead (*Oncorhynchus mykiss*) distribution and help prioritize barrier removals in the Willamette basin, Oregon, USA. *Canadian Journal of Fisheries and Aquatic Sciences*. 61: 999-1011.
- **Feist, BE**, EA Steel, GR Pess & RE Bilby (2003) The influence of scale on salmon habitat restoration priorities. *Animal Conservation*. 6(3): 271-282.
- Levin, PS, S Achord, **BE Feist** & RW Zabel (2002) Non-indigenous brook trout and the demise of Pacific salmon: a forgotten threat? *Proceedings of the Royal Society of London Biology.* 269: 1663-1670.
- Pess, GR, DR Montgomery, RE Bilby, EA Steel, **BE Feist** & HM Greenberg (2002) Correlation of landscape characteristics and land use on coho salmon (*Oncorhynchus kisutch*) abundance, Snohomish River, Washington State, USA. *Canadian Journal of Fisheries and Aquatic Sciences*. 59: 613-623.
- **Feist, BE** & CA Simenstad (2000) Expansion rates and recruitment frequency of exotic smooth cordgrass, *Spartina alterniflora* (Loisel), colonizing unvegetated littoral flats in Willapa Bay, Washington. *Estuaries*. 23(2): 267-274.
- Floor, E & **BE Feist** (1988) Most synaptic vesicles isolated from rat brain carry three membrane proteins, SV2, synaptophysin, and P65. *Journal of Neurochemistry*. 52:1433-1437.
- Floor, E, SF Schaeffer, **BE Feist** & SE Leeman (1988) Synaptic vesicles from mammalian brain: large scale purification and physical and immunochemical characterization. *Journal of Neurochemistry*. 50:1588-1596.

REPORTS, ARTICLES, ETC. (*INVITED)

- Northwest Fisheries Science Center (2011) Risk assessment of U.S. West Coast groundfish fisheries to threatened and endangered marine species. Northwest Fisheries Science Center, National Marine Fisheries Service. 2725 Montlake Blvd E, Seattle, WA.
- McCarthy, SG, J Spromberg, J Incardona, **B Feist**, J Labenia, MS Myers, L Rhodes, G Ylitalo, TK Collier, NL Scholz, J McIntyre, L Reed, K Lynch & T Davis (2008) Impacts of Stormwater Runoff on Coho Salmon in Restored Urban Streams. American Fisheries Society Symposium 64: 59
- Achord, S, EE Hockersmith, BP Sandford, RA McNatt, **BE Feist** & GM Matthews (2003) Monitoring the migrations of wild Snake River spring/summer chinook salmon smolts, 2002. Project No. 1991-02800, 101 electronic pages, (BPA Report DOE/BP-00005619-2). URL http://www.efw.bpa.gov/cgi-bin/efw/FW/welcome.cgi.
- *Steel, EA, L Johnston, **BE Feist**, G Pess, RE Bilby, D Jensen, T Beechie & J Myers (2003) Pacific salmon recovery planning and the Salmonid Watershed Analysis Model (SWAM): a broad-scale tool for assisting in the development of habitat recovery plans. *Endangered Species Update*. 20(1):1-32.
- **Feist, BE** (1999) A spatio-temporal analysis of the environmental and climatic factors controlling the expansion of *Spartina alterniflora* in Willapa Bay, Washington. Ph.D. Dissertation, University of Washington. Seattle, WA. 219 p. Web PDF Link

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- Simenstad, CA, **BE Feist**, J Morlan & PB Williams (1999) Assessment of potential dike-breach restoration of estuarine wetlands in Tillamook Bay, Oregon. Report to Tillamook Bay National Estuary Project. 57 p.
- Hyde T, **Feist BE** (1998) Olympic Coast National Marine Sanctuary. Silver Spring, MD: National Oceanic and Atmospheric Administration; Washington Sea Grant Program; Center for Marine Conservation. pp. 1 map: col.; 44 x 27 cm., on sheet 44 x 61 cm., folded to 22 x 10 cm.
- Simenstad, CA, JR Cordell, WG Hood, **BE Feist** & RM Thom (1997) Ecological status of a created estuarine slough in the Chehalis River Estuary: Assessment of created and natural estuarine sloughs, January December 1995. FRI-UW-9621, Report to U.S. Army Corps of Engineers, Seattle District. Wetland Ecosystem Team, Fisheries Research Institute, University of Washington, Seattle, WA. 47 p.
- Simenstad, CA & **BE Feist** (1996) Restoration potential of diked estuarine wetlands: Inferring fate and the recovery rate of historically-breached sites. EPA 910/R-96-005. 115 p.
- **Feist, BE**, JJ Anderson & RT Miyamoto (1996) Potential impacts of pile driving on juvenile pink (*Oncorhynchus gorbuscha*) and chum (*O. keta*) salmon behavior and distribution: Final report. University of Washington, School of Fisheries FRI Report. FRI-UW-9603.
- Copping, A, R Strickland, NC Blanton, EC Robichaud, L Hess, V Loe & **B Feist** (1994) Shared waters -- the vulnerable inland sea of British Columbia and Washington. International public symposium summary of the British Columbia/Washington Marine Science Panel, August 1994. 25 pp.
- **Feist, BE** (1991) Potential impacts of pile driving on juvenile pink (*Oncorhynchus gorbuscha*) and chum (*O. keta*) salmon behavior and distribution. M.S. Thesis, University of Washington. Seattle, WA. 67 p.
- **Feist, BE** & JJ Anderson (1991) Review of fish behavior relevant to fish guidance systems. University of Washington, School of Fisheries FRI Report. FRI-UW-9102. 100 pp.
- Anderson, JJ, **BE Feist**, RT Miyamoto, SO & S McConnell (1989) Measurement of low frequency sound at Bonneville, McNary, and Lower Granite Dams. University of Washington, School of Fisheries FRI Report. FRI-UW-8906.
- Miyamoto, RT, SO McConnell, JJ Anderson & **BE Feist** (1989) Underwater noise generated by Columbia River hydroelectric dams. Journal of the Acoustical Society of America 85(S1): 127.

BOOK CHAPTERS (*INVITED)

- *Feist BE (2012) Ecosystem. *In:* El-Shaarawi AH, Piegorsch WW, editors. Encyclopedia of Environmetrics. Second ed. Chichester, UK: John Wiley & Sons Ltd. pp. 774-778. DOI: 10.1002/9780470057339.vae010.pub2
- *Rice, CA, WG Hood, LM Tear, CA Simenstad, GD Williams, LL Johnson, **BE Feist** & PR Roni (2005) Monitoring Rehabilitation in Temperate North American Estuaries. Chapter 7 *In:* Methods for Monitoring Stream and Watershed Restoration. PR Roni, (ed.). American Fisheries Society, February 2005. 350 p.
- *Feist, BE & EO Box (2002) "Vegetation and Ecosystem Mapping". *In*: Encyclopedia of Science and Technology, 9th Edition, Volume 19. McGraw-Hill publishers, New York, NY. pp 197-203.

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PRESENTATIONS AT SCIENTIFIC MEETINGS (*INVITED, †ORAL, ‡POSTER)

- [†]A Beaudreau, P Levin & **BE Feist** (2012) Effects of climate variability on the distribution of demersal fishes in the California Current Large Marine Ecosystem. ICES/PICES Early Career Scientists Conference. Majorca Island, Spain.
- *†Feist, BE, ER Buhle, P Arnold, JW Davis & NL Scholz (2011) The challenge of solving complex environmental problems in urbanized systems: the case of coho spawner mortality syndrome in Puget Sound. Salish Sea Ecosystem Conference. Vancouver, British Columbia.
- [†]N Tolimieri, J Samhouri, **BE Feist** & PS Levin (2011) Ecological consequences of a precipitous decline in mean trophic level in the Northern California Current. 20th Annual North Pacific Marine Science Organization (PICES) Meeting. Khabarovsk, Russia.
- *Spromberg, J, D Baldwin, **BE Feist** & N Scholz (2011) Estimating impacts on coho salmon populations from land use-related spawner mortality in urban streams. 141st Annual American Fisheries Society Meeting. Seattle, WA.
- †**Feist, BE**, PS Levin N Tolimieri & AH Beaudreau (2011) Spatiotemporal Patterns of Representative Groundfish Species in the California Current Large Marine Ecosystem. 141st Annual American Fisheries Society Meeting. Seattle, WA.
- [†]Hasselman, DJ, TP Quinn, **BE Feist** & P Roni (2010) Range expansion of invasive American shad along the Pacific coast of North America. Cooperative Institute for Limnology and Ecosystem Research, Ann Arbor, MI.
- *Hasselman, DJ, TP Quinn, **BE Feist** & P Roni (2010) Range expansion of invasive American shad along the Pacific coast of North America. Cooperative Institute for Limnology and Ecosystem Research, Ann Arbor, MI.
- †**Feist, BE**, C Parada, K See & JL Ruesink (2009) Using ROMS ocean circulation models to predict the range expansion of non-indigenous European green crab (*Carcinus maenas*) along the west coast of North America. 18th Annual PICES Meeting. Jeju Island, South Korea.
- †**Feist, BE**, C Parada, K See & JL Ruesink (2009) Predicting the northward range expansion of nonindigenous European green crab (*Carcinus maenas*) along the west coast of North America. 6th International Conference on Marine Bioinvasions. Portland, Oregon.
- *†**Feist, BE**, P Arnold, J Davis & N Scholz (2009) Mysterious pre-spawn mortality of coho salmon in urbanized streams: there's something in the watershed. 2nd Annual South Sound Science Symposium. Shelton, Washington.
- *†Feist, BE, EA Steel, DW Jensen & DND Sather (2008) Does our scale of observation affect our perception of which habitat types are important for Pacific salmon? Western Division American Fisheries Society Annual Meeting. Portland, Oregon.
- *†Feist, BE, C Parada, K See & JL Ruesink (2008) Predicting the northward range expansion of non-indigenous European green crab (*Carcinus maenas*) along the west coast of North America. 17th Annual PICES Meeting. Dalian, China.

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- *†Feist, BE, EA Steel, GR Pess & DW Jensen (2007) Landscape characteristics and Pacific salmon distribution: Consistent patterns across watersheds. International Association for Landscape Ecology annual meeting. Wageningen, The Netherlands.
- *†Feist, BE, P Arnold, J Davis, S McCarthy & N Scholz (2007) Coho pre-spawn mortality in urbanized watersheds: what does the surrounding landscape tell us? Georgia Basin Puget Sound Research Conference. Vancouver, British Columbia.
- †**Feist, BE**, CJ Harvey, JL Ruesink & AC Trimble (2007) "Inconspicuous" impacts of *Spartina alterniflora* in temperate Eastern Pacific estuaries. 5th International Conference on Marine Bioinvasions. Cambridge, Massachusetts.
- *Davis, JW, P Arnold, S McCarthy, J Incardona, **B Feist**, N Scholz, L Reed & K Lynch (2007) Impacts of Stormwater Runoff on Coho Salmon in Restored Urban Streams. 28th Annual Meeting of the Society of Environmental Toxicology and Chemistry North America, Midwest Express Center, Milwaukee, Wisconsin
- †**Feist, BE**, CJ Harvey, JL Ruesink & AC Trimble (2006) "Inconspicuous" impacts of non-indigenous species in a Pacific Northwest estuary. International Conference on Aquatic Invasive Species. Key Biscayne, Florida.
- †Steel, EA, BE Feist, GR Pess, D Jensen, MB Sheer & RE Bilby (2006) Landscape Characteristics and Pacific Salmon: Consistent Patterns Across Watersheds and their Management Applications. 54th Annual Meeting of the North American Benthological Society, Anchorage, Alaska.
- *†**Feist, BE**, EA Steel, GR Pess & RE Bilby (2004) What is the correct scale for habitat analyses aimed at prioritizing restoration efforts for salmon? The Wildlife Society annual meeting. Calgary, Alberta.
- †Steel, EA, BL Sanderson, **BE Feist**, A Fullerton, MB Sheer & KM Burnett (2004) Landscape-scale analyses for understanding and managing freshwater ecosystems. World Fisheries Congress. Vancouver, British Columbia.
- †Steel, EA, MB Sheer, **BE Feist**, GR Pess, D Jensen & RE Bilby (2004) Barriers to migration fundamentally alter aquatic landscapes: Can models identify the best restoration opportunities? International Association for Landscape Ecology annual meeting. Las Vegas, Nevada.
- *†Feist, BE, CJ Harvey, JL Ruesink & AC Trimble (2004) The influence of non-indigenous smooth cordgrass, *Spartina alterniflora*, on estuarine ecosystems of the Pacific Northwest. International Association for Landscape Ecology annual meeting. Las Vegas, Nevada.
- [†]Beechie, TJ, M Pollock, **BE Feist**, G Pess & P Roni (2003) From deserts to rain forests: erosion regimes and the recovery of Pacific salmon. The Geological Society of America annual meeting. Seattle, Washington.
- †**Feist, BE**, CJ Harvey, JL Ruesink, AC Trimble & N Richardson (2003) The influence of non-indigenous smooth cordgrass, *Spartina alterniflora* on food web dynamics in Pacific Northwest estuaries Part II: Spatio-temporal patterns of oyster growth and diet. Estuarine Research Federation annual meeting. Seattle, Washington.
- [†]Harvey, CJ, **BE Feist**, JL Ruesink, AC Trimble & LM McCoy (2003) The influence of non-indigenous smooth cordgrass, *Spartina alterniflora* on food web dynamics in Pacific Northwest estuaries Part I:

- System scale influence on oyster diets. Estuarine Research Federation annual meeting. Seattle, Washington.
- †**Feist, BE**, R Hilborn & CA Simenstad (2002) A Simple Model for Predicting Recruitment and Expansion of Non-indigenous Smooth Cordgrass, *Spartina Alterniflora* (Loisel). American Society of Limnology and Oceanography annual meeting. Victoria, British Columbia.
- †Rice, C, CA Simenstad & **BE Feist** (2002) Assessment and Monitoring of Temperate Estuarine Restoration Activities, with Special Emphasis on Anadromous Salmonid Recovery in the Pacific Northwest. Toward Ecosystem-Based Management: Breaking Down the Barriers in the Columbia River Basin and Beyond. Spokane, Washington.
- [‡]Beechie, TJ, A Senauer, M Liermann & **BE Feist** (2002) Alteration of channel and ecosystem dynamics downstream of Elwha Dams. American Society of Limnology and Oceanography annual meeting. Victoria, British Columbia.
- *†Feist, BE, EA Steel, GR Pess & RE Bilby (2001) What is the correct scale for habitat analyses aimed at prioritizing restoration efforts for salmon? CAL-Nevada/Humboldt Chapters American Fisheries Society. Santa Rosa, California.
- †**Feist, BE**, EA Steel, GR Pess & RE Bilby (2000) A landscape scale, spatially explicit model for predicting Pacific salmon (*Oncorhynchus* spp.) productivity in the Pacific Northwest, USA. Modeling Complex Systems. Montreal, Quebec.
- †**Feist, BE**, EA Steel, GR Pess & RE Bilby (2000) A coarse-scale, spatially explicit model for predicting Pacific salmon (*Oncorhynchus* spp.) abundance as a function of land cover and land use in the Pacific Northwest, United States. Western Region American Fisheries Society. Telluride, Colorado.
- †Bilby, RE, GR Pess, **BE Feist** & EA Steel (2000) Relating Pacific salmon abundance to habitat and land use attributes. One Hundred Thirtieth Annual American Fisheries Society. St. Louis, Missouri.
- *†Feist, BE, EA Steel, GR Pess & RE Bilby (2000) Speaker/panelist for GIS in Action Conference, Portland, Oregon.
- †Feist, BE & CA Simenstad (1998) Predicting the expansion of smooth cordgrass, *Spartina alterniflora* (Loisel), in Willapa Bay, Washington, using spatial analysis, matrix models, and Geographic Information Systems (GIS). Nineteenth Annual Society of Wetland Scientists (SWS). Anchorage, Alaska.
- †Feist, BE & CA Simenstad (1998) Predicting the expansion of smooth cordgrass, *Spartina alterniflora* (Loisel), in Willapa Bay, Washington, using spatial analysis, matrix models, and Geographic Information Systems (GIS). Joint Pacific Estuarine Research Society/Northwest Algal Symposium. Whidbey Island, Washington.
- [†]Cordell, JR, CA Simenstad, **BE Feist**, KL Fresh, RM Thom, DJ Stouder & V Luiting (1998) Ecological effects of *Spartina alterniflora* invasion of the littoral flat community in Willapa Bay, Washington. Eighth International Zebra Mussel and Other Nuisance Species Conference. Sacramento California.
- †**Feist, BE** & CA Simenstad (1997) Predicting the expansion of smooth cordgrass, *Spartina alterniflora* (Loisel), in Willapa Bay, Washington, using spatial analysis and Geographic Information Systems (GIS). One Hundred Twenty Seventh Annual American Fisheries Society. Monterey, California.

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- †**Feist, BE** & CA Simenstad (1996) Changes in elevation and vegetation over time in a restored wetland as measured with a total station Global Positioning System (GPS). One Hundred Twenty Sixth Annual American Fisheries Society. Dearborn, Michigan.
- [‡]Wyllie-Echeverria, S, **BE Feist**, JR Cordell, AM Olson & CA Simenstad (1995) Subtidal eelgrass surveys in Puget Sound Basin: A videographic approach. Third Thematic Conference: Remote Sensing for Marine and Coastal Environments. Seattle, Washington.
- †**Feist, BE** & CA Simenstad (1995) Wetland sampling using a differential real-time global positioning system (GPS). Society of Wetland Scientists. Spokane, Washington.
- †**Feist, BE** & CA Simenstad (1993) A spatial analysis and model of the expansion of various populations of *Spartina alterniflora* in Willapa Bay, Washington. Pacific Estuarine Society/Society of Wetland Scientists. Long Beach, Washington.

AWARDS

- 2005 U.S. Department of Commerce Certificate of Recognition.
- 2004 U.S. Department of Commerce Certificate of Recognition.
- 2004 U.S. Department of Commerce Excellence in Education.
- 2003 U.S. Department of Commerce Certificate of Recognition.
- 2002 U.S. Department of Commerce Certificate of Recognition.
- 2001 Northwest Fisheries Science Center Quality Step Increase.
- 2001 U.S. Department of Commerce Certificate of Recognition.
- 2001 U.S. Department of Commerce Certificate of Recognition.
- 2000 U.S. Department of Commerce Certificate of Recognition.
- 1997 Achievement Award presented by The Society for Technical Communication, Puget Sound Chapter, Publication category.
- 1996 State Merit Award presented by ASLA, Landscape Communications and Research (Graduate) category.
- 1995 Honorable Mention for poster presented at Third Thematic Conference: Remote Sensing for Marine and Coastal Environments, Seattle, Washington.
- 1995 Excellence Award presented by The Society for Technical Communication, Puget Sound Chapter, Publication category
- 1993 Best Ph.D. Paper at School of Fisheries Graduate Student Symposium, University of Washington
- 1993 Best Student Paper at Pacific Estuarine Society/Society of Wetland Scientists meeting, Long Beach, WA

PROFESSIONAL SERVICES

- Reviewer for proposals submitted to Bonneville Power Administration, NOAA Sea Grant, Salmon Recovery Funding (SRF) Board, NIST Construction Grant Program, and the U.S. Department of Agriculture
- Reviewer for manuscripts submitted to the journals: Belgian Journal of Botany; Biological Conservation; Ecological Applications; Ecological Research; Environmental Biology of Fishes; Environmental Monitoring and Assessment; Estuaries; Frontiers in Ecology and the Environment; Hydrobiologia;

Landscape Ecology; Marine Ecology	Progress Series	; River Systems; ar	d, Transactions of the
American Fisheries Society.			

2006-P	Present PICES Aquatic Non-indigenous Species Working Group Member			
2002-P	002-Present Contributor for McGraw-Hill Encyclopedia of Science and Technology			
2005-2011 Panelist with Western Regional Panel on Aquatic Nuisance Species		Panelist with Western Regional Panel on Aquatic Nuisance Species		
2005-2010 NOAA Aquatic I		NOAA Aquatic Invasive Species Program West Coast Liaison		
2005-2010 Non-Indige		Non-Indigenous Species Point of Contact for the Northwest Fisheries Science Center		
2001-2010 Creator and coordinator of Northwest Fisheries Science C		Creator and coordinator of Northwest Fisheries Science Center Weekly Seminar Series		
2005	Invited guest speaker for University of Washington Extension Certificate Program in Wetland Science and Management			
2005-2	2005-2008 Member of the Aquatic Nuisance Species Task Force Research Committee			
2004-2	-2008 Assistant Faculty member at Oregon State University			
2004-2	04-2008 Ph.D. committee member for Francisco Madrinan, Oregon State University			
2001	Member of Salmon Recovery Funding (SRF) Board technical advisory panel			
2001	Invited guest lecturer for University of Washington Marine Biology Course (FISH 250)			
2001	Invited guest lecturer for University of Washington Course: Role of Habitat in Salmon Recovery (ENVIR 500)			
2000		evited guest speaker for University of Washington Extension Certificate Program in Wetland cience and Management		
1998		Chairperson of Natural Processes session C at the 19th Annual Meeting of the Society of Wetland cientists, Anchorage, Alaska.		
1997	Hortic	evited guest speaker for University of Washington Autumn Lecture Series at the Center for Urban orticulture entitled "The Management of Invasive Organisms in Urban and Natural Ecosystems" UHF 549)		
1997	Recruiting officer for the Estuaries Section of the American Fisheries Society (AFS)			
1997	Invited guest speaker for University of Washington Extension Certificate Program in Wetland Science and Management			
1996	Invited guest speaker for University of Washington Extension Certificate Program in Wetland Science and Management			
1996		nvited guest speaker for University of Washington course entitled "Computers in Landscape architecture" (LARC 440A)		
1993		Co-Organizer of the Fourth Annual Graduate Student Symposium, University of Washington, School of Fisheries		
1993		Member of Fisheries Interdisciplinary Network of Students Committee (FINS), School of Fisheries, University of Washington		

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RESEARCH GRANTS AND CONTRACTS

- 2010 NOAA Aquatic Invasive Species Program/Cooperative Institute for Limnology and Ecosystems Research, \$240k
- 2009 Northwest Fisheries Science Center Weekly Seminar Series \$25.5k
- 2008 Northwest Fisheries Science Center Weekly Seminar Series \$24k
- 2008 National Oceanic and Atmospheric Administration Aquatic Invasive Species Program, "Improving European Green Crab Range Expansion Forecasting by Integrating Environmental Niche, Habitat Capability, and Ocean Circulation Modeling Techniques", \$41k
- 2007 Northwest Fisheries Science Center Weekly Seminar Series \$20k
- 2007 National Oceanic and Atmospheric Administration Aquatic Invasive Species Program, "The Potential Spatial Range and Ecological Impacts of European Green Crab along the Northeast Coast of the Pacific Ocean", \$51k
- 2006 Northwest Fisheries Science Center Weekly Seminar Series \$24k
- 2006 National Oceanic and Atmospheric Administration Aquatic Invasive Species Program, "The Potential Range of Green Crab Infestations on the West Coast of North America", \$41k
- 2005 Northwest Fisheries Science Center Weekly Seminar Series \$32.5k
- 2004 U.S. Bureau of Reclamation, "Application of Advanced Spectral Remote Sensing in Assessment, Monitoring, and Modeling for the Anadromous Salmonids of the Columbia River Basin Ecosystem", \$300k (2 years)
- 2004 Northwest Fisheries Science Center Weekly Seminar Series \$32k
- 2003 Northwest Fisheries Science Center Weekly Seminar Series \$24.5k
- 2002 Northwest Fisheries Science Center Weekly Seminar Series \$21k
- 2001 Northwest Fisheries Science Center Internal Grants Program, Sediment Budget Modeling, \$28k (2 years)
- 2002 Northwest Fisheries Science Center Internal Grants Program, Food Web Dynamics in Invaded Estuaries, \$29k (2 years)
- 2003 National Oceanic and Atmospheric Administration Aquatic Nuisance Species Program, Landscape Controls on the Invasion of Exotic Estuarine Plants, \$60k

EXTRACURRICULAR

- Classically trained string bass player. Have performed professionally with various symphonies, jazz ensembles, and pop music groups.
- Avid bicyclist and ride bicycle to benefit various charitable fund-raisers

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REFERENCES

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